A.D. 1898. Sep. 17. N° 19,725.
WILSON & another's COMPLETE SPECIFICATION.

1 SHEET

FIG. 1.

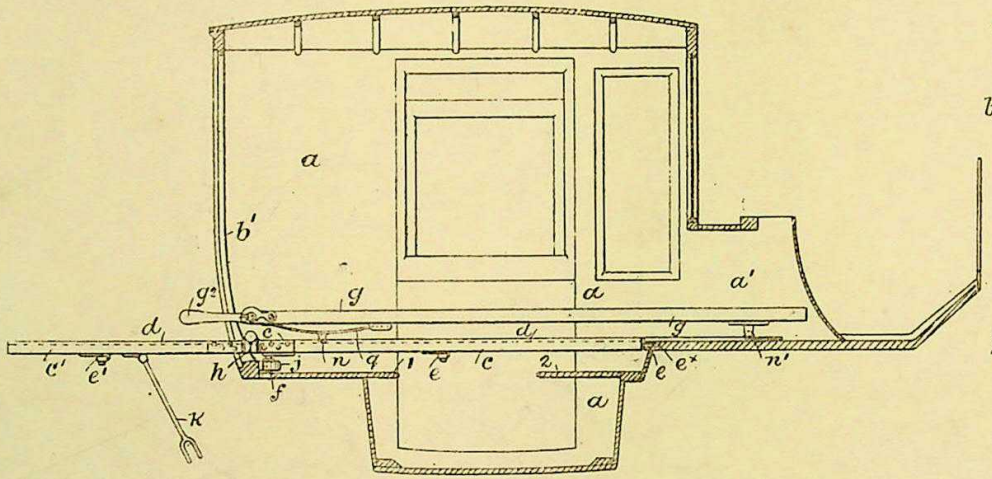


FIG. 3.

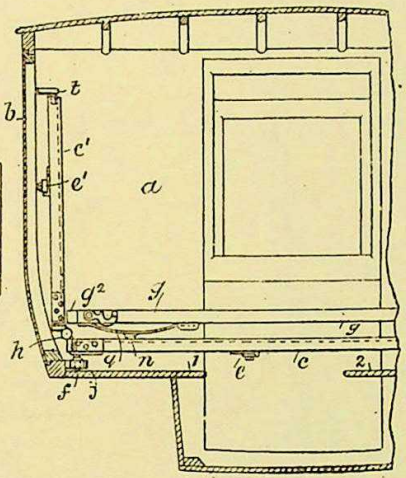


FIG. 4.

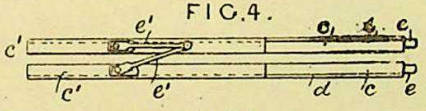


FIG. 5.

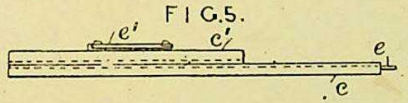


FIG. 6.

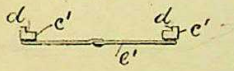
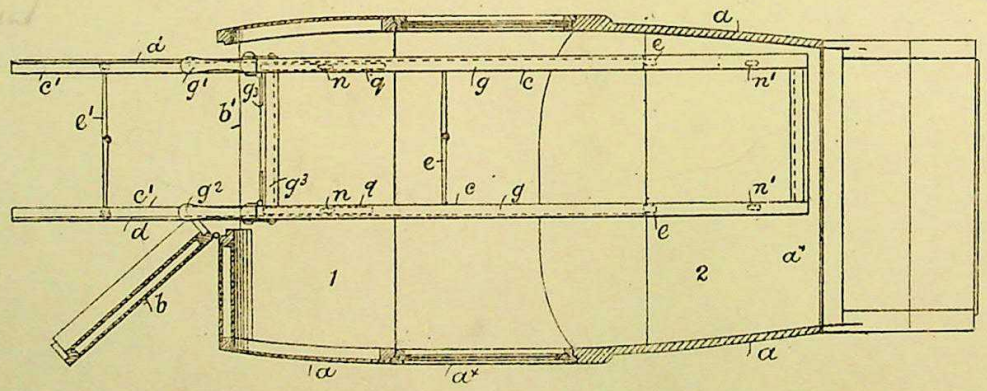


FIG. 2.



N° 19,725 A.D. 1898

Date of Application, 17th Sept., 1898
Complete Specification Left, 17th June, 1899—Accepted, 29th July, 1899

DUPLICATE

PROVISIONAL SPECIFICATION.

Improvements in Ambulances.

We, THOMAS WILSON and FREDRICK JOHN STOCKALL, both of the County Works, Bury, in the County of Lancaster, Carriage and Ambulance Builders, do hereby declare the nature of this invention to be as follows :—

This invention is designed principally to be applied to that class of ambulances known as "brougham ambulances," but the invention is also applicable to other forms of wheeled ambulances used for carrying hospital and other patients, or injured persons.

The invention consists principally of a portable rabbeted wood frame which fits lengthways in the interior of the carriage or van and extends through the door at the back of body. This frame is provided with a hinged extension outside the body which when the door is open is supported by two folding legs or props of iron which rest on the hind axle of the vehicle when in use. This extended frame forms a kind of tramway which facilitates the placing of a patient in the ambulance in a recumbent position, and also makes it much easier to remove the patient. The stretcher with the patient thereon is first placed upon the extension and then pushed forward into the ambulance.

When the stretcher, with the patient thereon, has been passed forward into the carriage the hinged extension can be folded up out the way and the door closed, so that the frame (and its extension) is carried with the ambulance and is always ready for use.

The stretcher is fitted with folding handles, and two small elongating or "grasshopper" springs, and four small wheels or runners which run upon the frame or tramway above named.

The whole of the frame and the stretcher can readily be removed from the body of the ambulance and the interior will then seat four adult persons, so that it can be used in this form when the patients are not so ill or injured as to necessitate a recumbent position.

Dated this 16th day of September 1898.

GEO. DAVIES & SON,
Agents for the Applicants, 4, St. Ann's Square, Manchester.

COMPLETE SPECIFICATION.

Improvements in Ambulances.

We, THOMAS WILSON and FREDRICK JOHN STOCKALL, both of the County Works, Bury, in the County of Lancaster, Carriage and Ambulance Builders, do hereby declare the nature of this invention and in what manner the same is to be performed to be particularly described and ascertained in and by the following statement :—

This invention relates to an improvement in the class of ambulances known as

"brougham ambulances" but is also applicable to other forms of wheeled conveyances that are or may be employed for carrying sick or injured persons to or from a hospital or other place. The object of this our invention is to enable a brougham to be employed either as an ambulance for the conveyance of a person in a recumbent position in the company of an attendant or attendants, or the brougham to be used as an ordinary carriage, if persons are able to be conveyed in a sitting position.

In the accompanying drawing Fig. 1 is a vertical section of a brougham or carriage with our invention applied, said carriage being constructed so that it may be employed in either of the forms hereinbefore named. In this view the ambulance is represented in the position as it would appear when the stretcher on which a patient is supposed to have been conveyed from any place in a recumbent position has been placed in the brougham.

Fig. 2 is a plan of the same, Fig. 3 is a vertical section of the rear part of the brougham shown in Fig. 1 with a part of the ambulance folded so as to permit the door at the end of the brougham to be closed.

Fig. 4 is a plan, Fig. 5 an edge view, and Fig. 6 an end view of the collapsible frame or tramway on which the stretcher rests when in the brougham. In these views similar letters refer to similar parts.

According to this invention we construct a brougham or carriage as a with a door b at the back in addition to the ordinary door on each side of the carriage, and a compartment a^1 formed in the boot under the coachman's seat.

We form the rear entrance b^1 near to one side of the carriage and of a width sufficient to place therein a stretcher as g. A frame or tramway c which is constructed with an extension c^1 to fold up in the manner shown in Figs. 3, 4 and 5 is formed with a longitudinal rebate d extending from end to end of the frame, hinged rods e e^1 connect the two side bars of the frame c c^1 together which when extended keep said bars parallel at a fixed distance apart; the front ends of each of the bars is provided with a flat metallic lug or projection e for insertion in recesses $e^\times$ in the framing of the carriage. The frame c is hinged at h and is provided with a stud f under each of the side bars which fits into a socket j attached to the frame of the carriage.

The rear end or extension c^1 of the frame c is supported by struts as k resting on the rear axle of the carriage during the period that the stretcher g is being placed in the carriage.

The stretcher g which is constructed to pass through the entrance b^1 at the rear end of the carriage consists of a wood frame with an elastic centre such as a diamond wire mesh and spiral springs upon which to place an india rubber air bed or other preferred equipment (not shown on the drawing). We fit runners or rollers n n^1 in brackets on the underside of the said stretcher, or if preferred, slides, and a spring or springs as q may be introduced to support the stretcher and to which the rollers or runners may be attached. The handles g^1 and g^2 are hinged and may be turned against the cross bar g^3 of the frame after the stretcher has been placed in the carriage.

In applying our invention to a carriage constructed as hereinbefore described, the frame or tramway represented in Figs. 4 and 5 is placed in the carriage by inserting the lugs e in the recesses e^x and then extending the side bars c to the width allowed by the hinged bars e e^1. The pins f are then placed in the sockets j and the extension c^1 turned over so as to lie in the same plane, the supports k resting on the rear axle of the carriage; the stretcher g is then placed on said frame, the rollers n n^1 running on and within the rebated portion d of the frame or tramway c c^1.

When the stretcher has been pushed in as far as is shown in Figs. 1 and 2, the handles g^1 and g^2 are folded back against the end g^3 of the stretcher, the rear end c^1 of the frame c is turned up as shown in Fig. 3 and retained by a spring t, and the door b is closed, an attendant or attendants entering by the door a^x and occupying the seats 1 and 2. If the ambulance is not required for the use of a patient in a recumdent position the whole of the hinged frame or tramway can be instantly removed and folded up in a conveniently small compass as shown in Figs. 4 and 5, thereby

enabling the brougham to be employed for the conveyance of four persons sitting in an ordinary position whose illness may not necessitate a recumbent position.

Having now particularly described and ascertained the nature of our said invention and in what manner the same is to be performed we declare that what we claim is:—

1st. An ambulance for the conveyance of sick or injured persons that is constructed with a collapsible frame or tramway as *c* for placing in a carriage or brougham as *a* in combination with a stretcher as *g* fitted with rollers for running on said tramway and provided with an elastic diamond mesh or other wire centre and suitable equipment as an air bed or the like substantially as and for the purpose hereinbefore described.

2. An ambulance for the conveyance of sick or injured persons that is constructed by a combination of a wheeled carriage or brougham as *a* having a space within the boot and a door at the rear end of said carriage, a frame or tramway for placing longitudinally within the carriage and secured thereto by studs *f* and sockets *j* or their equivalents, a hinged extension c^1 provided with temporary supports as *k* and a stretcher as *g* fitted with rollers or equivalents for running or sliding on said tramway all substantially as hereinbefore described and shown on the accompanying drawings.

Dated this 15th day of June 1899.

GEO. DAVIES & SON,
Agents for the Applicants, 4, St. Ann's Square, Manchester.

Redhill: Printed for Her Majesty's Stationery Office, by Malcomson & Co., Ltd.—1899.